# Frequency Measuring Test — November 2023

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The November Frequency Measuring Test (FMT) will have two transmitting stations: Michael Suhar, W8RKO, in Ohio, and Connie Marshall, K5CM, in Oklahoma. Transmissions will be made on 40 and 80 meters, in that order. This should give stations throughout North America an opportunity to receive and measure a strong signal.

If you've never entered an FMT before, information on how to measure the frequency of a carrier is available at **www.k5cm.com**.

## **Measurement Software**

The free software tools are quite advanced. If you're already using the *WSJT-X* suite of FT8 or WSPR, you can use its frequency calibration mode as a sophisticated frequency measurement tool. Joe Taylor, K1JT, explains how to use *WSJT-X* for frequency measurement in "Accurate Frequency Measurements with your WSPR Setup" (https://wsjt.sourceforge.io/FMT\_User.pdf).

# **FMT Schedule and Format**

The FMT "runs" will start with a call up by W8RKO at 0230 UTC on November 17 (Thursday evening in North America). The call-up frequency may not be the exact frequency as during the key-down period (it may shift as much as 10 Hz). Although the call up is scheduled to start at a specific time, both stations will try to

start earlier to establish a clear frequency. Every effort will be made to start key down at the published time in Table 1. The key-down period will be 1 minute.

Measure the transmitted frequency and report your results at **https://fmt.arrl.org**. Results must be submitted by 0200 UTC on November 20, at which time they'll be published on the website. Stations submitting measurements within 1 Hz for all transmissions from W8RKO and K5CM will be listed in the "Green Box" of the results.

## Table 1

## **Frequency Measuring Test Schedule**

Start: November 17 at 02:30 UTC (Thursday evening in North America)

Results: Submit measurements online until November 20 at 02:00 UTC (Sunday evening in North America)

#### 40 Meters: W8RKO near 7064 kHz

02:30 Call up 02:33 Key down 02:34 End 40-meter run

## 40 Meters: K5CM near 7065 kHz

02:45 Call up 02:48 Key down 02:49 End 40-meter run

#### 80 Meters: W8RKO near 3598 kHz

03:00 Call up 03:03 Key down 03:04 End 80-meter run

#### 80 Meters: K5CM near 3599 kHz

03:15 Call up 03:18 Key down 03:19 End 80-meter run

If there's interference on the published frequency, tune around to find the FMT transmissions.

| ARRL Home FMT Home Data Entry Current FMT Results Historical Results  | Frequency I  | Measuring Tests  |
|---|--|------------------|
| Data Entry<br>Use this form to enter the supporting information and frequencies you measured during the April 21                  | 2023 Frequency Measuring Test (FMT).   |                  |
| Name: Call Sign: QTH: Select Grid Square: (6-character) E-mail Address: Measured Frequencies (Hz) (leave blank in on measurement) |  |                  |
| 80m 40m<br>KSCM W8RK0<br>FMT Equipment/Method:  | This online data entry form is availab<br>https://fmt.arrl.org/fmtentry.php. P<br>include notes and observations about | lease<br>It mak- |
|   | ing your measurement, including the<br>ment used and any special technique<br>Results are published immediately for    | es.              |
| Soapbox:  | the submission deadline.   | 0                |
| Submit) Clear   |  |                  |